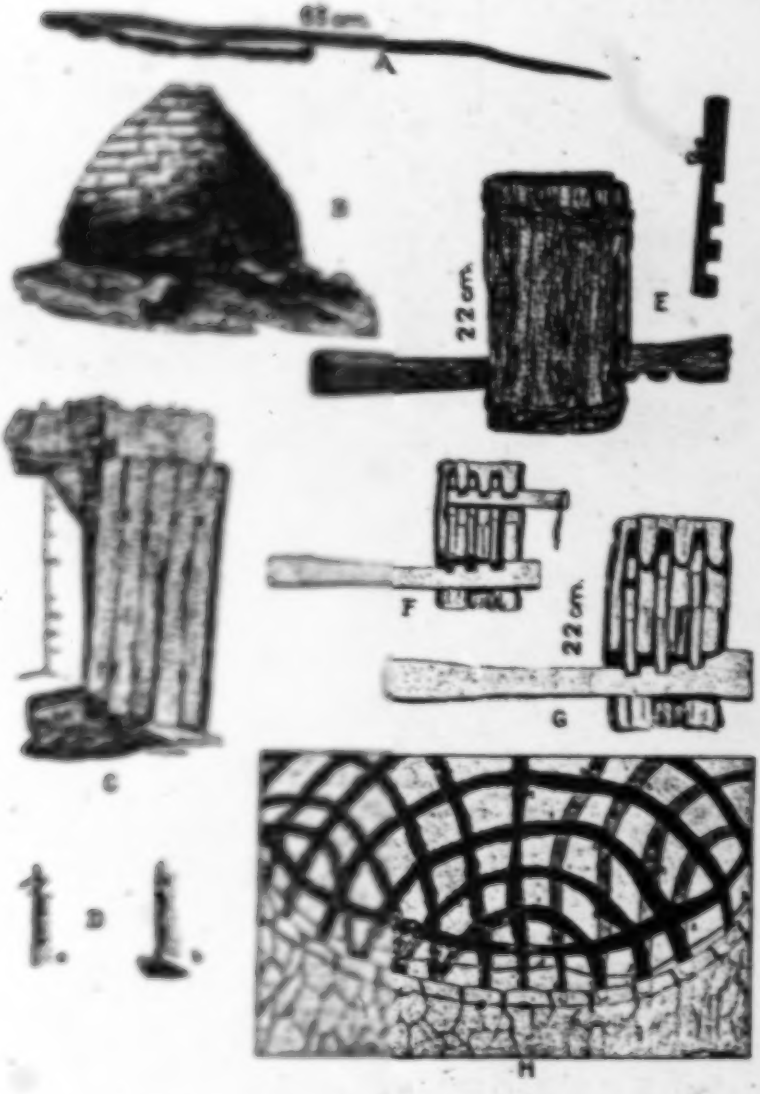
2:446maus--142 8-5 (1930)-1931) 1935, 1936 SF24 Uru SF24

Carangas —
Chipaya

• 413 [157]
343
414
415
342
[365]



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2:Métraux--142a E-5 (1930-1931) 1935, 1936 SF24 Uru SF24
Carangas—
Chipaya

/157 cont./

Fig. 1. — Čipaya material culture. The habitation.

413
342
414
335
A: Needle with which the Čipaya sew the thatch to the frame.
B: Hovel of clods of earth.
C: Door of cactus wood.
D: Detail of the door. a: top; b: bottom.
E: Čipaya lock and key.
F, G: The same lock seen in cross section.
H: Schema showing the method of constructing the framework of the cupola which covers the roof of the huts.

9:La Barre E-4,5 (1938) 1941
SF24 Uru SF24

396 knives on the ends of poles, then stacked in shocks like corn, after they have been dried spread out in the sun. Nearly all able-bodied Uru males have quantities of these materials in various stages toward the manufacture of the complete boats. In their houses, even, in spare moments, men are continually braiding *ilw*-grass into tough ropes to bind the boats together.

Though shaped like a boat, the *balsa* is of course actually a raft. A handful of reeds is bound together and repeatedly thickened with more reeds as the middle of the cigar-shaped element is reached, then tapered off again into a point. The only tool used in the manufacture of this is a wooden hook (*kayle*) with a handle at an acute angle to it, used to tighten the lashing of grass rope. A more tubular and thinner sheaf of reeds forms the keel of the *balsa*, and two of the fat cigar-shaped bundles are separately lashed to it, forming a sort of sea-sled type of hull, which cannot be overturned in a storm; the thinner ends of these cigar-shaped bundles are slightly raised fore and aft of the boat. To form gunwales, a still thinner and tubular sheaf of reeds is lashed (during its own round-and-round binding with braided grass rope) through the original lashing of the hull-elements. One of these gunwales (*pisala*) is placed on each side of the top of the hull-elements to prevent splashing of water onto the occupants of the boat as it is poled along. The Uru *balsa* thus differs from the Aymára[28] type in that its two large basic elements are lashed to a central "keel" and not to each other (though the bulwark lacings are similarly looped through the lacings of the two hull-elements); it has therefore five instead of four elements. The Uru also rig their *totora*-mat sails with a slight difference from the Aymára. Sails, however, can only be used on the Lake and on the open river "before the wind" since the boat has no center-board and cannot tack. In the narrow swamp-ways a punt pole or gaff (*tokoi*) with a stubby trident at its end is used to push the boat along. The wood for these comes from the *yungas* of the Cordillera Real's eastern, tropical slopes. (See Posnansky, Fig. 83.) A complete *balsa* cost in 1937 from ten to sixteen *bolivianos*, then worth about 5¢.

285 Of Uru textiles we have already noted twined single-element *totora balsa*-sails, twined many-element mattress-mats of reed, fish- and bird-nets (which they themselves make of cord obtained in Guaqui from La Paz), and 283 single-element twined *reed* mats of *totora*. Métraux has an excellent description (page 86) of the preparation by soaking, pounding, and rolling of the wiry grasses of the region (*Stipa ichu*, *Festucha orthophylla*, and *F. dis-*

[28] Lorenzo R. Parodi, *Los balsas usadas por los Aymaras en el lago Titicaca* (Physis, Revista de la Sociedad argentina de ciencias naturales, Vol. 11, Buenos Aires, 1932), pp. 145-149. Métraux' description (JSAP 27: 84) is of the Aymára type.